

ENERGY STAR® QUALIFIED DEHUMIDIFIERS

CONSUMER BENEFITS

- ENERGY STAR qualified models remove the same amount of moisture as a similarly sized standard units, but use 10 to 23% less energy. (see table 1)
- A 50-pint ENERGY STAR qualified dehumidifier can save consumers roughly \$20 per year. This can add up to more than \$200 over the 11-year life of the unit, enough to pay for the dehumidifier. (see table 2)

Table 1. ENERGY STAR Criteria

	Current Criteria	Future Changes ¹
ENERGY STAR	Energy efficiency is measured by the Energy Factor (EF) in liters of water removed per kilowatt-hour of energy consumed.	The current dehumidifier specification has been in effect since January 1, 2001. Since then, the market penetration of ENERGY STAR qualified products within the 10 – 35 liters/day category has quickly grown, representing more than two-thirds of product shipments to date.
	Capacity (liters/day)	The current specification for dehumidifiers has been revised. Tier 1 of the Version 2.0 specification will go into effect October 1, 2006. Tier 2 will commence on June 1, 2008. Visit http://www.energystar.gov/index.cfm?c=revisions.dehumid_spec for more information on the new specification.
	Capacity (pints/day)	
	Minimum EF	
	0 to 10	
	0 to 21	
	> 10 to 25	1.2
	> 21 to 52	1.3
	> 25 to 35	1.5
	> 35 to 57	2.25

* Energy Factor--(EF) allows a comparison of relative efficiencies. A higher EF is more efficient.

Table 2. Annual ENERGY STAR Savings Per Unit²

	ENERGY STAR vs. non-qualifying 50 pint/day Dehumidifier			ENERGY STAR vs. 5-year old 50 pint/day Dehumidifier		
Energy Usage	ENERGY STAR	New Non-Qualified	Annual Savings	ENERGY STAR	5-year old	Annual Savings
Electricity (kWh)	2,161	2,378	216	Same As Current Models		
Utility Cost	\$182	\$200	\$18			

Note: \$.0841/kWh used to estimate dollar amounts.³

UTILITY COST EFFECTIVENESS DATA

- Average product lifetime: 11 years⁴
- Average annual energy savings of ENERGY STAR qualified dehumidifier vs. non-qualified dehumidifier: 216 kWh/year (50 pint/day model)
- Average peak savings of ENERGY STAR qualified dehumidifiers (50 pint/day): 50 Watts⁵
- Typical ENERGY STAR price premium: None⁶
- Approximate price range for ENERGY STAR qualified dehumidifiers: \$140 - \$1,400 (all capacities), \$180 - \$230 (50 pints/day)
- 2003 national dehumidifier shipments: 1,311,039 units⁷

¹ Source: September 8, 2004 letter from Andrew Fanara, EPA, to Dehumidifier Partners.

² Source, US EPA. Annual energy consumption estimates are based on 6 months of operation per year with a 66% duty cycle.

³ Average electricity costs as published by the Department of Energy in the Federal Register on April 9, 2003.

⁴ Appliance Magazine's 27th Annual Portrait of the US Appliance Industry, September 2004

⁵ Assumes annual savings (216 kWh) occurs over a six-month period of usage.

⁶ National retailer Web sites, and store visits in Fall 2003. Price premiums are estimated by comparing ENERGY STAR and non-ENERGY STAR dehumidifier pricing data.

⁷ Appliance Magazine's 27th Annual Portrait of the US Appliance Industry, September 2004

ENERGY STAR® QUALIFIED DEHUMIDIFIERS

- Average saturation of dehumidifiers in residential housing: 19%⁸
- 2003 national retail market share of ENERGY STAR qualified dehumidifiers: 63% (see table 3 for regional information)⁹.
- 2003 national market share shipments: 85%¹⁰

Table 3. ENERGY STAR 2003 Dehumidifier Retail Market Share by Region	
Region	2003 Retail Market Share
Alaska/Hawaii	59-71%
California	75%
Lower Midwest	32-64%
Mid-Atlantic	44-71%
New England	71-84%
New York	74%
Northwest	38-74%
South/Southeast	24-39%
Southwest/Rockies	13-81%
Upper Midwest	53-77%

MARKET SNAPSHOT

- The market share of ENERGY STAR qualified dehumidifiers has grown rapidly to 85% since the launch of this product category in 2001. In some regions of the country it is now difficult to purchase a non-ENERGY STAR qualified model at major retail outlets.
- Dehumidifier shipments in the US have increased in the last five years going from 870,000 units in 1999 to 1,300,000 in 2003. Shipments are highest in regions of the country that experience high relative humidity and high rainfall levels at least some part of the year.
- In 2003, Whirlpool was the leader in market share (30%), LG Electronics was second (25%) and rapidly growing. W.C. Wood, Electrolux (Frigidaire), and Fedders all had market shares exceeding 10%.¹¹
- The major retailers for residential dehumidifiers are Best Buy, The Home Depot, K-Mart, Lowe's, Sears, Target, Wal-Mart, and various home appliance stores. Sales are generally associated with wet/humid seasons and peak sales periods will vary slightly from region to region. (see table 4)
- In choosing among models available in the market, consumers evaluate dehumidifiers based on four criteria: price, size (pints/day), weight, and design. For many consumers, price is the main criteria for selection.

Table 4. ENERGY STAR Dehumidifier Retail Distribution	
Retailer	Brands
Best Buy	Whirlpool LG Electronics Haier
Lowe's	Whirlpool
Sears	Kenmore LG Electronics
The Home Depot	Fedders Hampton Bay Haier Maytag
Wal-Mart	Fedders Goldstar

⁸ Appliance Magazine's 27th Annual Portrait of the US Appliance Industry, September 2004

⁹ Participating national ENERGY STAR retail partners.

¹⁰ U.S. EPA ENERGY STAR Products and Market Penetration Tracking

¹¹ Appliance Magazine's 27th Annual Portrait of the US Appliance Industry, September 2004